[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9189; Product Identifier 2016-NM-114-AD; Amendment

39-19578; AD 2019-03-26]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. This AD was prompted by reports of passenger service units (PSUs) becoming detached from the supporting airplane structure in several Model 737 series airplanes. This AD requires modifying the PSUs and life vest panels by replacing the existing inboard lanyard and installing two new lanyards on the outboard edge of the PSUs and life vest panels; measuring the distance between the hooks of the torsion spring of the lanyard assembly; replacing discrepant lanyard assemblies; and re-identifying serviceable lanyard assemblies. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600

Westminster Blvd., MC 110 SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet https://www.myboeingfleet.com. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-9189.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-9189; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Scott Craig, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3566; email: michaels.craig@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. The NPRM published in the <u>Federal Register</u> on October 13, 2016 (81 FR 70647). The NPRM was prompted by reports of PSUs becoming detached from the supporting airplane structure in several Model 737

series airplanes during survivable accidents. The NPRM proposed to require modifying the PSUs and life vest panels by removing the existing inboard lanyard and installing two new lanyards on the outboard edge of the PSUs and life vest panels.

We issued a supplemental NPRM (SNPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes. The SNPRM published in the <u>Federal Register</u> on September 14, 2018 (83 FR 46666). We issued the SNPRM to add airplanes to the applicability, add a measurement of the distance between the hooks of the torsion spring of the lanyard assembly, replace discrepant lanyard assemblies, and re-identify serviceable lanyard assemblies.

We are issuing this AD to address PSUs and life vest panels detaching from the supporting airplane structure, which could lead to passenger injuries and impede passenger and crew egress during evacuation.

Comments

We gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the SNPRM and the FAA's response to each comment.

Request to Include PSU-mounted Liquid Crystal Display (LCD) Panels

JeJu Air requested that we consider adding actions similar to those in the SNPRM for PSU-mounted LCD panels. JeJu Air noted that they experienced an incident in which four PSU-mounted LCD panels dropped during flight, resulting in minor injuries to several passengers. JeJu Air stated that PSU-mounted LCD panels are not subject to routine inspections through a manufacturer's maintenance planning document. The commenter added that the PSU-mounted LCD panels are heavier than normal PSUs and therefore could be riskier for passengers if they fall.

We acknowledge the commenter's concern. However, making the requested change would require issuance of a second SNPRM with another public comment period, delaying the issuance of a final rule. To delay this action would be inappropriate, since we have determined that an unsafe condition exists and that PSU modifications and lanyard replacements must be made to ensure continued safety. We will consider additional rulemaking to address PSU-mounted LCD panels. We have not changed this AD in this regard.

Request to Revise the Applicability

Boeing requested that we revise the applicability of the proposed AD (in the SNPRM) to The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes "as identified in Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018." Boeing stated that including airplanes beyond those identified in Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018, would not add to the safety of the operating fleet. Boeing added that airplanes with potentially affected lanyard assemblies, whether included in reworked airplanes, installed during production, or issued in kits, are all categorized and addressed in Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018.

We disagree with the commenter's request. The PSUs and lanyard assemblies are rotable parts that can be installed on airplanes that previously did not have affected PSUs and lanyard assemblies installed. Therefore, the applicability of this AD, "all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, certificated in any category, without a Boeing Sky Interior (BSI)," ensures that no PSUs without the updated lanyard assemblies are installed and the unsafe condition is addressed on all affected airplanes. We have not changed this AD in this regard.

Request to Correct a Service Bulletin Effectivity Range

Boeing requested that we revise the "Differences Between This SNPRM and the Service Information" section of the SNPRM to note that the effectivity of Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018, is limited to "line numbers 1 through 6099," rather than "line numbers 1 through 6009."

We acknowledge this typographical error. However, the "Differences Between This SNPRM and the Service Information" section does not carry over into this AD. Therefore, we have not changed this AD in this regard.

Request to Remove a Requirement to Add an Identifying Mark

American Airlines (AAL) requested that we remove a requirement in the proposed AD (in the SNPRM) to identify new lanyard assemblies as serviceable by adding a permanent white mark. AAL noted that Figure 1, step 3 of Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018, which is Required for Compliance (RC), says to "Identify the lanyard assembly as serviceable with a permanent white mark, that can be easily seen when the PSU is lowered." The commenter stated that new lanyards received in certain kits are deemed serviceable, but not identified with a white mark. AAL asked why the parts would be marked at installation rather than inspection or fabrication, which seems to place the burden on installers to determine the lanyard assembly is serviceable.

We disagree with the commenter's request. Some previously delivered lanyard assembly kits contained lanyards that were manufactured incorrectly and might not properly secure the PSU in the event of an accident. By inspecting and identifying the lanyard assembly during installation, operators can ensure that the correct lanyard assembly is installed on an airplane. On some airplanes, a correct lanyard assembly may already be installed and only needs to be identified with a white mark. Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018, clearly identifies a serviceable

lanyard assembly, and the white mark is an important part of that definition. We have not changed this AD in this regard.

Request to Provide More Details on PSU Removal and Installation

AAL requested that the Boeing 737NG Aircraft Maintenance Manual (AMM) 25-23-61 provide more detailed instructions for removing and installing the PSU. AAL noted that Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018, provides detailed instructions for attaching the lanyard clip to the PSU rail, but the AMM does not provide the same level of instructions. We infer that the commenter is asking us to require Boeing to update the AMM to provide more details.

We acknowledge the commenter's request. The AMM is identified as an affected publication in Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018; however, this AD does not require compliance with the AMM, and the AMM is not part of an RC step in the service bulletin. The AMM is referred to as one source of information for removing and installing the PSU, but as noted in paragraph (i)(4)(ii) of this AD, operators may rely on their own accepted methods in accordance with the operator's maintenance or inspection program for those steps. In addition, Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018, provides adequate details to address the unsafe condition in this AD. Therefore, we have not changed this AD in this regard.

Request to Revise the Costs of Compliance

AAL stated that Boeing Service Bulletin 737-25-1707, dated September 24, 2015, provided a work-hours task total of 1.35 work-hours per PSU. The commenter added that Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018, increased the scope of work done on the PSU, but reduced the work-hours task total to 0.4 work-hours per PSU. We infer that the commenter is suggesting that the work-hour estimates should be revised in the final rule.

We agree to clarify the Costs of Compliance section of this AD. Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018, separates the work-hour estimates into multiple tables based on group configurations and the type of work to be done. Adding all of the work-hours from the applicable tables for a given configuration, the total work-hours estimate is higher for certain configurations. Therefore, the estimated costs in this AD represent the highest work-hours and parts cost for all configurations. We have not changed this AD in this regard.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the SNPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the SNPRM.

Related Service Information under 1 CFR part 51

We reviewed Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018. This service information describes procedures for modifying the PSUs and life vest panels by replacing the existing inboard lanyard and installing two new lanyards on the outboard edge of the PSUs and life vest panels, measuring the distance between the hooks of the torsion spring of the lanyard assembly, replacing any discrepant lanyard assemblies, and re-identifying serviceable lanyard assemblies. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 2,015 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Measurement and modification	Up to 75 work-hours X \$85 per hour = Up to \$6,375	Up to \$11,760	Up to \$18,135	Up to \$36,542,025

According to the manufacturer, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all known costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In

accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
 - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2019-03-26 The Boeing Company: Amendment 39-19578; Docket

No. FAA-2016-9189; Product Identifier 2016-NM-114-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, certificated in any category, without a Boeing Sky Interior (BSI).

(d) Subject

Air Transport Association (ATA) of America Code 25, Equipment/furnishings.

(e) Unsafe Condition

This AD was prompted by reports of passenger service units (PSUs) becoming detached from the supporting airplane structure in several Model 737 series airplanes during survivable accidents. We are issuing this AD to address PSUs and life vest panels detaching from the supporting airplane structure, which could lead to passenger injuries and impede passenger and crew egress during evacuation.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

Within 60 months after the effective date of this AD, do all applicable actions identified as "RC" (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018.

(h) Parts Installation Prohibition

As of the applicable time specified in paragraph (h)(1) or (h)(2) of this AD, no person may install on any airplane a PSU or life vest panel, unless the lanyard assembly has been updated as required by paragraph (g) of this AD.

- (1) For airplanes that have PSUs or life vest panels without the updated lanyard assemblies installed: After modification of the airplane as required by this AD.
- (2) For airplanes that have PSUs or life vest panels with the updated lanyard assemblies installed: As of the effective date of this AD.

(i) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.
- (3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing

Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

- (4) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (i)(4)(i) and (i)(4)(ii) of this AD apply.
- (i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled "RC Exempt," then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.
- (ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(j) Related Information

For more information about this AD, contact Scott Craig, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3566; email: michaels.craig@faa.gov.

(k) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact Boeing Commercial

Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminster Blvd.,

MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; Internet

https://www.myboeingfleet.com.

(4) You may view this service information at the FAA, Transport Standards

Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of

this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the

National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Des Moines, Washington, on February 14, 2019.

Michael Kaszycki,

Acting Director,

System Oversight Division,

Aircraft Certification Service.

[FR Doc. 2019-03408 Filed: 3/1/2019 8:45 am; Publication Date: 3/4/2019]

13